

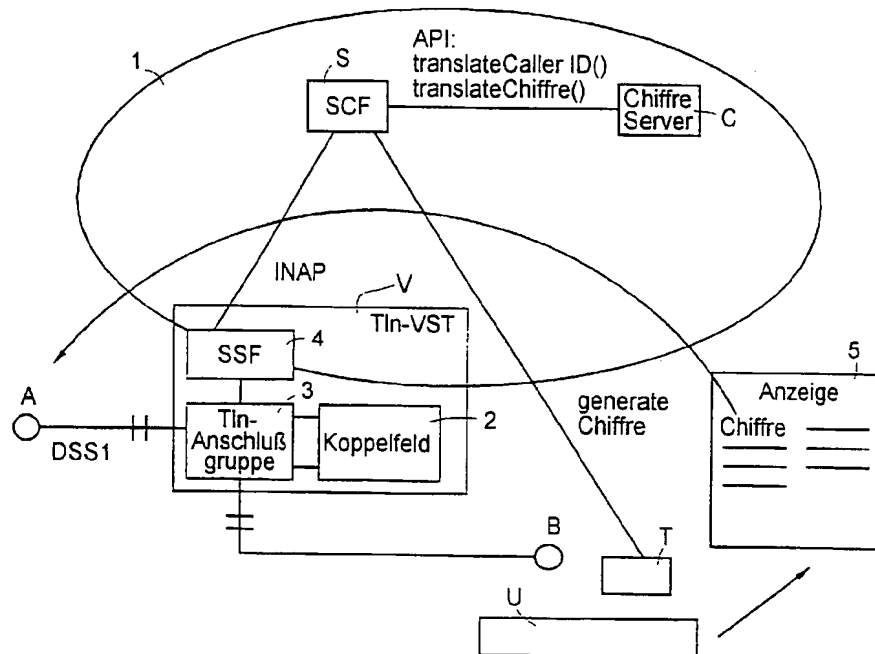
(51) Cl.Int.⁷/Int.Cl.⁷ H04Q 3/00

(71) **Demandeur/Applicant:**
DEUTSCHE TELEKOM AG, DE

(72) **Inventeurs/Inventors:**
BITTROFF, ULRICH, DE;
DE CAMBRAY, LAETITIA, DE;
HERZOG, UWE, DE;
LORANG, CHRISTOF, DE;
CAPELLMANN, CARLA, DE;
DASSOW, HEIKO, DE

(74) **Agent:** FETHERSTONHAUGH & CO.

(54) Titre : PROCÉDE D'ETABLISSEMENT D'UNE CONNEXION DANS UN RESEAU DE TELECOMMUNICATIONS
(54) Title: METHOD FOR ESTABLISHING A CONNECTION IN A TELECOMMUNICATIONS NETWORK



The invention relates to a method for establishing a connection from an initiating subscriber to a designated subscriber in a telecommunications network without providing the respective initiating subscriber with the permanent identifier of the designated subscriber. The invention provides that an anonymous identifier is assigned by a confidence instance (S, C) to the permanent identifier of the designated subscriber (B). In order to establish the connection via the initiating subscriber while using the anonymous identifier of the active home exchange (V), the utilized identifier is indicated as an anonymous identifier and is routed to the confidence instance (S, C). The confidence instance (S, C) determines the assigned permanent identifier from the routed anonymous identifier and transmits it to the home exchange (V). The home exchange (V) proceeds to establish the connection to the designated subscriber (B) while using the transmitted permanent identifier. An embodiment of the method also serves to transmit an anonymous identifier for a future return call to a called subscriber.

BEST AVAILABLE COPY



Canadian Intellectual
Property Office

Office de la propriété
intellectuelle du Canada

Canada

Français
Strategis

Contact Us
Site Map

Help
What's New

Search
About Us

Canada Site
Registration



Strategis Index: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



Canadian Patents Database

Patent Document Number 2371135 :

METHOD FOR ESTABLISHING A CONNECTION IN A TELECOMMUNICATIONS NETWORK

**PROCEDE D'ETABLISSEMENT D'UNE CONNEXION DANS UN RESEAU DE
TELECOMMUNICATIONS**

CLAIMS:

What is claimed is:

1. A method for establishing a connection from an initiating subscriber to a destination subscriber in a telecommunications network without the respective initiating subscriber knowing permanent identifier of the destination subscriber, wherein
 - an anonymous identifier is assigned to the permanent identifier of the destination subscriber (B) by a confidence instance (S, C),
 - for establishing the connection via the initiating subscriber while using the anonymous identifier, the utilized identifier is recognized by the particular active switching center (V) as an anonymous identifier and routed to the confidence instance (S, C),
 - the confidence instance (S, C) determines the assigned permanent identifier from the received anonymous identifier and transmits it to the switching center (V),
 - the switching center (V) proceeds to establish the connection to the destination subscriber (B) while using the transmitted permanent identifier.
2. The method as recited in Claim 1; wherein the confidence instance is constituted by a code server (C) in conjunction with a service control function (S) of the telecommunications network which is at least partially designed as an intelligent network (1), and the routing of the anonymous identifier from the switching center (V) and the transmission of the permanent identifier to the switching center (V) take place via a service switching function of the intelligent network (1).
3. The method as recited in Claim 1; wherein the anonymous identifier is deleted at a predetermined time after the assignment.

4. The method as recited in one of the preceding Claims, wherein the anonymous identifier can be deleted by an input of the destination subscriber.
5. The method as recited in one of the preceding Claims, wherein a permanent identifier can be assigned only one anonymous identifier at a time.
6. The method as recited in Claim 5; wherein an authorization check is carried out before the confidence instance assigns the anonymous identifier.
7. The method as recited in one of the Claims 5 or 6, wherein error messages are output by the confidence instance when an assignment is not possible.
8. The method as recited in one of the preceding Claims, wherein the request for the assignment of the anonymous identifier and the communication thereof take place over the Internet.
9. The method in one of the Claims 1 through 7, wherein the request for the assignment of the anonymous identifier and/or the communication thereof take(s) place via data transmission from the destination subscriber via a digital connection.
10. The method as recited in Claim 9; wherein the digital connection is constituted by the D channel of the ISDN.
11. The method as recited in one of the Claims 1 through 7, wherein the request for the assignment of the anonymous identifier and/or the
- 13 communication thereof take(s) place via data transmission from the destination subscriber by means of the multifrequency method.
12. The method as recited in one of the Claims 1 through 7, wherein the request for the assignment of the anonymous identifier and/or the communication thereof take(s) place via data transmission in the form of short messages (SMS).
13. The method as recited in one of the Claims 1 through 7, wherein the request for the assignment of the anonymous identifier and/or the communication thereof take(s) place via data transmission in the form of electronic mail (E-Mail).
14. The method as recited in one of the Claims 1 through 7, wherein the request for the assignment of the anonymous identifier and/or the communication thereof take(s) place via voice input and voice output.
15. The method as recited in one of the preceding Claims, wherein the assignment is requested by an input of the destination subscriber.
16. The method as recited in one of the Claims 1 or 2, wherein the request for the assignment between the anonymous and the permanent identifiers takes place during the dialing of a permanent identification of a later initiating subscriber by the destination subscriber, and the anonymous identifier is transmitted to the later initiating subscriber.
17. The method as recited in Claim 16 for establishing a return connection after the termination of a connection to the initiating subscriber started by the destination subscriber, wherein the anonymous identifier is converted by the confidence instance (8, C) into the permanent identifier of the destination subscriber (R) on request (R1) of the

14 initiating subscribes, and the return connection to the destination subscriber (B) is established (R9) while using the permanent identifier.

18. The method as recited in Claim 17, wherein the anonymous identifier assigned to the destination subscriber (B) is generated anew for each connection establishment to a later initiating subscriber.

19. The method as recited in one of the preceding Claims, wherein when a return call is established using the anonymous identifier, the destination subscriber (B) is informed of this fact by a perceivable signaling.

20. The method as recited in Claim 19, wherein a connection requested by the initiating subscriber (A) is automatically established from the destination subscriber (h) upon completion of the signaling after the destination subscriber has confirmed that a connection is to be established, the connection being automatically effected from the destination subscriber (B) to the initiating subscriber (A).

21. The method as recited in one of the Claims 17 through 20, wherein the permanent identifier is transmitted (H6) to a code server (C) linked to the network, the code server (C) converts the permanent identifier into a free anonymous identifier and stores the anonymous identifier for the period of validity thereof with the permanent identifier being assigned thereto, and the code server outputs (H7) the anonymous identifier which is transmitted to the initiating subscriber.

22. The method as recited in Claim 21, wherein the anonymous identifier is transmitted (R6) to the code server (C), and the code server (C), by the way of the stored assignments, retrieves and outputs (R7)~

15 the permanent identifier.

23. The method as recited in Claim 17, wherein the permanent identifier of the destination subscriber (B) is routed to a service control function (S) by the switching center (V) of the telecommunications network (1); the service control function (S) obtains (H6) an anonymous identifier from a code server (C) while indicating the identifier of the destination subscriber (B); the code server (C) converts the identifier into a free anonymous identifier and stores the anonymous identifier for the period of validity thereof with the permanent identifier being assigned thereto and outputs the anonymous identifier to the service control function; the service control function (S) routes the anonymous identifier to the switching center (V); and the switching center (V) establishes the connection with the called initiating subscriber (A) while indicating (H9) the anonymous identifier.

24. The method as recited in Claim 23, wherein an identifier which identifies the code server is added to the anonymous identifier.

25. The method as recited in one of the Claims 23 or 24, wherein for a return call, the anonymous identifier of the destination subscriber (B) is routed to a service control function (S) by an appropriate switching center (V) of the network (1), the service control function (S) obtains (R6) the permanent identifier of the destination subscriber (B) from the appropriate code server (C) while indicating the anonymous identifier, the service control function (S) routes this identifier to the switching center (V); and the switching center (V) establishes (R9) the connection with the destination

16 subscriber (B).

26. The method as recited in one of the preceding Claims, wherein the telecommunications network (1) is a circuit-switched network for voice or data transmission, and the identifiers are telephone numbers.

27. The method as recited in one of the preceding Claims, wherein the anonymous telephone number includes a dialing prefix for dialing up the confidence instance (S, C).

28. The method as recited in one of the Claims 1 through 25, wherein the telecommunications network is a network for transmitting data of any kind including video and audio data and/or textual messages and the identifiers are user addresses of this network.

